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CLAIMS

1. An embossing and laminating device for embossing and joining together plies of web material, comprising: a supporting structure (3); a first embossing cylinder (9) provided with protuberances (9P); a first pressure roller (21) cooperating with said first embossing cylinder (3); a second embossing cylinder (11), provided with protuberances (11P); a second pressure roller (23) cooperating with said second embossing cylinder (11); characterized in that at least said first and said second embossing cylinder (9, 11) are carried by an interchangeable assembly or sub-structure (7), which can be mounted on and removed from the fixed structure.

2. Device as claimed in claim 1, characterized in that said first and said second embossing cylinder (9, 11) are carried by said interchangeable assembly, while said first and said second pressure roller (21, 23) are carried by the fixed structure.

3. Device as claimed in claim 2, characterized in that actuator members (33, 35) are positioned on said fixed structure to press the pressure rollers against the embossing cylinders.

4. Device as claimed in claim 1, 2 or 3, characterized in that said first and said second embossing cylinder are positioned on said interchangeable assembly in phase with each other.

5. Device as claimed in claim 4, characterized in that said first and said second embossing cylinder are phased so that the respective protuberances are arranged in a tip-to-tip configuration.

6. Device as claimed in claim 4, characterized in that said first and said second embossing cylinder are phased so that the respective protuberances are in a nested configuration.

7. Device as claimed in claim 6, characterized in that a laminating roller (12) is mounted on said interchangeable assembly, cooperating with said first or second embossing cylinder.

8. Device as claimed in one or more of the previous claims, characterized in that said interchangeable assembly carries means to transmit motion from the first to the second embossing cylinder.

9. Device as claimed in claim 8, characterized in that said means

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to transmit motion from the first to the second embossing cylinder comprise a pair of gears keyed on the axles of the first and of the second embossing cylinder.

10 10. Device as claimed in claim 9, characterized in that said gears are immersed in an oil bath.

11. Device as claimed in one or more of the previous claims, characterized in that said supporting structure comprises a kinematic transmission (41) of movement from a source of motion (39) to said first or second embossing cylinder.

10 12. Device as claimed in claim 11, characterized in that said kinematic transmission comprises a motorized wheel and a belt (41) to transmit motion to said first or second embossing cylinder.

15 13. Device as claimed in one or more of the previous claims, characterized in that said supporting structure (3) comprises two sides with substantially vertically extending portions, in which slots (3B) are provided, inside which corresponding portions (13A) of sides (13) of said interchangeable assembly (7) are inserted, the axle (9A) of the first embossing cylinder being positioned inside said slots when the interchangeable assembly is mounted on the supporting structure.

20 14. Device as claimed in claims 11 and 13, characterized in that said kinematic transmission transmits motion to said first embossing cylinder.

25 15. Device as claimed in at least claim 13 or 14, characterized in that on the opposite side of said vertically extending portions from said interchangeable assembly said structure carries a gluing unit (5), cooperating with said first embossing cylinder.

30 16. Device as claimed in one or more of the previous claims, characterized in that at least one of said first and second pressure roller is supported by a pair of arms (25; 29) oscillating around an axis (27; 31) fixed in relation to said supporting structure (3) to adopt at least two different operating positions.

17. Device as claimed in claim 16, characterized in that said pressure roller supported in such a way as to adopt at least two operating positions is the second pressure roller.

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18. Device as claimed in one or more of the previous claims, characterized in that one of said first and second embossing cylinder is supported on said interchangeable assembly by arms (17) oscillating around an axis (19) fixed in relation to said interchangeable assembly.

5 19. Device as claimed in claim 18, characterized in that when the interchangeable assembly is mounted on the supporting structure, said oscillating arms (17) carrying the embossing cylinder cooperate with at least an actuator (37) which presses said first and said second embossing cylinder against each other.

10 20. Device as claimed in one or more of the previous claims, characterized in that it comprises means for quickly clamping said interchangeable assembly on said supporting structure.

21. Device as claimed in one or more of the previous claims, characterized in that it comprises at least two interchangeable assemblies
15 differing from each other.

22. Device as claimed in one or more of the previous claims, characterized in that said interchangeable assembly or assemblies are movable on guides to be translated towards or away from said fixed structure.

23. Device as claimed in one or more of the previous claims,
20 characterized in that a gluing unit (5) is mounted on said supporting structure.